

REMARKS

The comments of the Applicant below are each preceded by related comments of the Examiner (in small, bold type)

2. Claims 1-21 and 24-35 rejected under 35 U.S.C. 103(a) as being unpatentable over Burke et al. (US Patent Number 5,406,643) in view of Palm (US Patent Number 6,735,245).

Regarding claims 1, 8, and 15 Burke et al. disclose an apparatus for allocating channels, comprising:

a memory that stores executable instruction signals (see fig. 2, section 14, ROM);

and

a processor that executes the instruction signals to (see fig. 2, section 16, CPU):
determine the communication standard used by the received message (see col. 2, lines 25-29, a subscriber unit to select from amongst a plurality of communications media, that particular media for establishing a communications path to a specified end point);

determine available channels(see col. 2, lines 44-48, The packet server maintains a session list identifying currently available connections (virtual links) to a specific end point,);
and

allocate a channel based on the available channels and the communication standard used by the received message (see col. 2, lines 49-53, The device manager maintains a list specifying the possible communications paths to specific end points and actually controls the communications resources responsible for establishing a communications path).

However over Burke et al. fail to specifically point out receiving a message having a format that is in compliance with a communication standard, and determine the communication standard used by the received message, allocate a channel based on the available channels and the communication standard used by the received message as claimed.

Palm teaches receiving a message having a format that is in compliance with a communication standard, and determines the communication standard used by the received message, and allocate a channel based on the available channels and the communication standard used by the received message (see col.4-5, lines 63-5, determines the communication standard, of the received examination negotiation information, see col. 5, lines 20-23- the negotiation information being in compliance to a communication standard);

Palm teaches allocate a channel based on the communication standard used by the received message (see col. 4, lines 44-53, auditing a condition of the communication channel, and selection based on the communication standard and the capability).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention n was made to combine Burke et al.'s invention with Palm's invention, because Palm invention detects various configuration capabilities and limitations of a communication channel, to determine an appropriate communication standard appropriate for the existing line conditions (see Palm, col. 2, lines 47-51).

1. Determine communication standard according to format of received message

Palm does not describe and would not have made obvious determining the communication standard used by the received message "according to the format of the received message," as recited in amended claim 1.

Palm describes a system having a communication channel (see FIGS. 1, 2, and 6-12), and various configurations, capabilities and limitations of the communication channel and associated equipment are detected in order to determine a specific (e.g., xDSL) communication standard appropriate for the existing line conditions (col. 2, lines 45-51). Palm describes performing an audit of the communication channel and installed equipment to select the most appropriate communication method (col. 4, lines 4-8). For example, a channel examination signal is transmitted in order to determine the communication capability of the communication link to be established (col. 10, lines 59-61). Palm does not disclose or suggest determining the communication standard used by the received message "according to the format of the received message," as recited in claim 1.

What is missing in Palm is also not disclosed in Burke, which permits a subscriber unit to select among a plurality of communication media (col. 2, lines 26-27).

2. Allocate channel based on communication standard

Burke does not describe and would not have suggested "allocating a channel based on ... the communication standard used by the received message," as recited in claim 1.

Burke discloses a packet server 34 that receives a connection command that specifies destination information and various communication criteria. The packet server 34 selects a communications path based on the destination information and the communication criteria specified by the connection command (col. 7, lines 10-23). In rejecting claim 1, the Examiner points to column 2, lines 49-53 of Burke, which describes a device manager that controls the communications resources responsible for establishing a communications path. However, controlling communications resources responsible for establishing a communications path is different from allocating a channel based on a communication standard used by a received message. If the Examiner contends that the "communication path" of Burke corresponds to the "channel" of claim 1, then Burke discloses how to control communications resources to establish

a communications path, but does not disclose or suggest allocating a communication path based on the communication standard used by a received message. Therefore, Burke does not disclose or suggest "allocating a channel based on ... the communication standard used by the received message," as recited in claim 1.

What is missing in Burke is also not disclosed or suggested by Palm. Palm's system has one communication channel and thus does not allocate the channel based on the communication standard used by a received message.

Claims 8 and 15 are patentable for at least similar reasons as those applied to claim 1.

The dependent claims are patentable for at least the reasons for which the claims they depend are patentable. Moreover, these claims add additional distinctive features.

For example, claims 4, 11, and 18 are also distinct over the references. Each of claims 4, 11, and 18 recites ... the spectrum of channels includes a channel dedicated to AMPS. Although Burke states that communication paths can be wireless, Burke does not disclose a channel dedicated to AMPS.

Claim 24 is also distinct over the references. Claim 24 recites ... the processor sends an instruction to allocate a channel dedicated to the communication standard for communicating with a mobile device that sent the message. In rejection claim 24, the Examiner points to a section of Burke that discloses sending data and control information to media communications equipment, such as infrared transceivers, fiber optic transceivers, wire-line modems, and/or RF modems (col. 4, lines 18-21). The Examiner appears to contend that "media communications equipment" of Burke corresponds to the "mobile device" of claim 24. However, Burke does not disclose or suggest determining a communication standard used by a message sent from a media communications equipment.

Claim 25 is also distinct over the references. Claim 25 recites ... the processor sends an instruction to a software-defined signal processing device to send another message to the mobile device to use the allocated channel.

Claim 26 is also distinct over the references. Claim 26 recites ... the communication standard comprises at least one of advance mobile phone service (AMPS), global system for

mobile communications (GSM), code division multiple access (CDMA), enhanced data rates for GSM evolution (EDGE) and wideband code division multiple access (WCDMA) standard. Although Burke states that communication paths can be wireless, Burke does not disclose AMPS, GSM, CDMA, EDGE, or WCDMA standard.

Claim 27 is also distinct over the references. Claim 27 recites ... the processor receives messages having formats that are in compliance with communication standards, at least some of different messages complying with different communication standards, and the processor allocates channels dedicated to the communication standards associated with the messages. Palm describes detecting various configurations, capabilities and limitations of the communication channel and associated equipment in order to determine a specific (e.g., xDSL) communication standard appropriate for the existing line conditions. Palm does not disclose or suggest allocating channels dedicated to the communication standards associated with the messages.

Claim 28 is also distinct over the references. Claim 28 recites ... the processor receives messages having formats that are in compliance with communication standards, at least some of different messages complying with different communication standards, and the processor dynamically responds to the messages to utilize spectrum according to a current usage pattern. Palm describes analyzing the received channel information and using the analyzed information to select the appropriate communication standard. Palm does not disclose or suggest dynamically responding to messages to utilize spectrum according to a "current usage pattern."

Claim 29 is also distinct over the references. Claim 29 recites ... the processor determines frequencies licensed to a user of the message. Neither Burke nor Palm discloses use of frequencies that are licenses to a user of a message.

Claim 32 is also distinct over the references. Claim 32 recites ... the received message comprises a short-message, text, a housekeeping signal, or intended consumer signals.

Claim 33 is also distinct over the references. Claim 33 recites ... the message comprises a broadcast.

Claim 34 is also distinct over the references. Claim 34 recites ... the processor sends an instruction to allocate a channel dedicated to the communication standard for communicating with a mobile device that receives the broadcast.

Claim 35 is also distinct over the references. Claim 35 recites ... the processor sends an instruction to a software-defined signal processing device to send another message to the mobile device to use the allocated channel.

Any circumstance in which the applicant has addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner. Any circumstance in which the applicant has made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims. Any circumstance in which the applicant has amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

Please apply \$104 for the Excess Claims fee and \$555 for the Petition for Extension of Time fee and any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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